

During Expedition Mars, student teams are exposed to the following national standards.

Next Generation Science Standards

MS-ESS2-5: Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.

MS-ETS1-1: Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.

MS-ETS1-2: Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.

MS-ETS1-3: Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.

MS-PS2-2: Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object.

MS-SEP 6-8: Ask questions to clarify evidence of an argument.

MS-SEP 6-8: Construct a scientific explanation based on valid and reliable evidence obtained from sources.

MS-SEP 6-8: Analyze and interpret data to determine similarities and differences in findings.

MS-SEP 6-8: Conduct an investigation to produce data to serve as the basis for evidence that meet the goals of an investigation.

Common Core State Standards

L.6-8.6: Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or a phrase important to comprehension or expression.

RI.6.7: Integrate information presented in different media formats as well as in words to develop a coherent understanding of a topic or issue.

RST.6-8.3: Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

RST.6-8.7: Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually.

RST.6-8.9: Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.

SL.6.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

SL.6.2 Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.

WHST.6-8.9: Draw evidence from informational texts to support analysis, reflection, and research.

MP1: Make sense of problems and persevere in solving them.

MP2: Reason abstractly and quantitatively.

MP6: Attend to precision.